

## ASSIGNMENT 5

Textbook Assignment: "Mechanical and Electrical Maintenance," chapter 5, pages 5-1 through 5-27.

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|---|---|
| <p>5-1. The majority of all accidents occur as a result of what specific reason?</p> <ol style="list-style-type: none"><li>1. Lack of training</li><li>2. Improper procedures</li><li>3. Sheer carelessness</li><li>4. Lack of supervision</li></ol>  | <p>5-6. Most nuts turn in what direction for removal?</p> <ol style="list-style-type: none"><li>1. Clockwise</li><li>2. Counterclockwise</li></ol>  |
| <p>5-2. Safety is the responsibility of which of the following personnel?</p> <ol style="list-style-type: none"><li>1. Supervisors only</li><li>2. Safety officers only</li><li>3. Supervisors and safety officers</li><li>4. Everyone</li></ol>  | <p>5-7. When using a micrometer type torque wrench, it should be placed on what setting before being returned to storage?</p> <ol style="list-style-type: none"><li>1. One-half scale</li><li>2. Three quarter scale</li><li>3. Lowest setting</li><li>4. Highest setting</li></ol> |
| <p>5-3. When working on ordnance equipment there are how many basic requirements for the prevention of accidents?</p> <ol style="list-style-type: none"><li>1. 1</li><li>2. 2</li><li>3. 3</li><li>4. 4</li></ol>   | <p>5-8. Because they have an extended handle, torque wrenches may be used to break loose bolts which have been previously tightened.</p> <ol style="list-style-type: none"><li>1. True</li><li>2. False</li></ol>   |
| <p>5-4. When air and hydraulic fluid are mixed under pressure, an explosive mixture is the result. This mixture is best defined by what term?</p> <ol style="list-style-type: none"><li>1. Hydraulic/air action</li><li>2. High pressure reaction</li><li>3. Gasoline action</li><li>4. Diesel action</li></ol> | <p>5-9. Burns, unconsciousness, stoppage of breathing, and cardiac arrest are symptoms of what type of injury?</p> <ol style="list-style-type: none"><li>1. Mechanical shock</li><li>2. Electrical shock</li><li>3. Heat stroke</li><li>4. Heat exhaustion</li></ol>                |
| <p>5-5. During normal operation, air and hydraulic valves should be opened in what manner?</p> <ol style="list-style-type: none"><li>1. Rapidly</li><li>2. Only half-way</li><li>3. One quarter turn per minute</li><li>4. Slowly</li></ol>   | <p>5-10. Shock is severe enough to paralyze muscles at approximately how many milliamperes?</p> <ol style="list-style-type: none"><li>1. 10</li><li>2. 25</li><li>3. 50</li><li>4. 100</li></ol>  |

- 5-11. The intensity of electrical shock is dependent upon which of the following factors?
1. Resistance
  2. Voltage
  3. Current
  4. Capacitance
- 5-12. When practical, you should not work on energized circuits or equipment.
1. True
  2. False
- 5-13. Rubber gloves should be worn if voltage is expected to exceed what specific voltage level?
1. 50 volts
  2. 150 volts
  3. 220 volts
  4. 440 volts
- 5-14. Before attaching alligator clips to any circuit, what prerequisite action must be performed?
1. Conduct a visual inspection
  2. Conduct a self-test
  3. Verify the equipment is energized
  4. Verify the equipment is de-energized
- 5-15. Both the removal and replacement of fuses are dependent upon what action being completed on the affected circuit?
1. Resistance checked
  2. Voltage checked
  3. De-energized
  4. Energized
- 5-16. When performing maintenance, all circuit breakers and switches from which power could possibly be supplied should be tagged in what position?
1. Off
  2. On
  3. Reset
  4. Automatic
- 5-17. Fires involving wood, paper, and rubbish would be classified as what type of fire?
1. A
  2. B
  3. C
  4. D
- 5-18. Fires involving oil, grease, gasoline, and paints are classified as what class of fire?
1. A
  2. B
  3. C
  4. D
- 5-19. Fires involving insulation and other combustible materials in electrical and electronic equipment are classified as what class of fire?
1. A
  2. B
  3. C
  4. D
- 5-20. The preferred extinguishing agent for electrical fires is which of the following agents?
1. High velocity fog
  2. Low velocity fog
  3. Water
  4. Carbon dioxide
- 5-21. A foam extinguishing agent should **NOT** be used on de-energized circuits.
1. True
  2. False
- 5-22. To manage the completion of routine maintenance, the Navy uses which of the following documents?
1. MRC
  2. Job sheets
  3. Flow charts
  4. Technical manuals

- 5-23. Maintenance that is mostly concerned with inspection is done at which of the following intervals?
1. Weekly
  2. monthly
  3. Quarterly
  4. Daily
- 5-24. There are how many main classes of maintenance?
1. 1
  2. 2
  3. 3
  4. 4
- 5-25. The urgent repair or overhaul work required to get equipment returned to an operational status is considered what type of maintenance?
1. Preventive
  2. Corrective
  3. Routine
  4. Depot
- 5-26. The surface vessel torpedo tubes that are the fixed (stationary) type are which of the following configurations?
1. Mk 32 Mod 5
  2. Mk 32 Mod 7
  3. Mk 32 Mod 9
  4. Mk 32 Mod 14
- 5-27. General preparation for corrective maintenance on surface vessel torpedo tubes, constitutes that you should perform what action with the securing mechanism?
1. Install
  2. Remove
  3. Charge
  4. Power up
- 5-28. When working on pneumatic systems, you must cover all openings with what material(s)?
1. Heavy paper or tape
  2. Glass only
  3. Wood only
  4. Glass or wood
- 5-29. Fault isolation and corrective repair procedures are located in what documentation?
1. A 3-M Manual
  2. An applicable technical manual
  3. A flow chart
  4. A job sheet
- 5-30. To ensure system integrity after corrective maintenance, what type of testing should be performed?
1. Preliminary
  2. Operational
  3. Final
  4. Routine
- 5-31. Replacement of most gauges is considered what type of maintenance?
1. Casualty
  2. Local
  3. Routine
  4. Monthly
- 5-32. On a surface vessel torpedo tube, if you have the barrel in the ready condition and the torpedo tube fails to fire electrically or manually, which of the following casualties might be the probable cause?
1. The flask pressure is below minimum psig
  2. The flask pressure is above maximum psig
  3. A defective thermost switch
  4. A defective solenoid
- 5-33. Additional information on lubricants, fluids, and cold weather lubrication is contained in which of the following documents?
1. OD 3000
  2. OD 44979
  3. OD 43 P
  4. OD 4300

- 5-34. Submarine launching system repair/maintenance is divided into what number of categories?
1. 5
  2. 4
  3. 3
  4. 2
- 5-35. Major overhaul or modification action performed by qualified repair activities falls under which of the following categories?
1. A only
  2. B only
  3. A and B
  4. C
- 5-36. Components used to indicate the position or status of switches, solenoids, fuses and power circuits would be defined by which of the following terms?
1. Relay only
  2. Solenoid only
  3. Relay or solenoid
  4. Indicator light
- 5-37. The symbol for a light on schematics for new ordnance equipment would be which of the following designators?
1. DS
  2. F
  3. K
  4. LT
- 5-38. The simplest form of a circuit protective device is which of the following components?
1. Relay
  2. Solenoid
  3. Fuse
  4. Switch
- 5-39. If a circuit draws more current than the rated value of the fuse, what happens to the fuse?
1. It charges up
  2. It blows or opens
  3. It measures the current
  4. It closes or completes the circuit
- 5-40. Fuses are rated by the amount of current they can safely carry.
1. True
  2. False
- 5-41. The schematic designator for a fuse is which of the following letters?
1. LZ
  2. KZ
  3. F
  4. K
- 5-42. A component used for making, breaking, or changing the connections in an electric circuit is which of the following devices?
1. A fuse
  2. A switch
  3. A solenoid
  4. A relay
- 5-43. Switches are frequently classified using which of the following characteristics?
1. Current rating
  2. Physical size
  3. Voltage applied
  4. Number of poles
- 5-44. A component designed to open or close a circuit when the current through its coil is applied and removed, or varied in magnitude is which of the following devices?
1. A solenoid
  2. A switch
  3. A relay
  4. A fuse
- 5-45. A schematic designator for a relay is which of the following letters?
1. L
  2. F
  3. K
  4. Z

- 5-46. A component that converts an electrical input into mechanical output is which of the following devices?
1. A switch
  2. A fuse
  3. A relay
  4. A solenoid
- 5-47. A break in a circuit is normally referred to by which of the following terms?
1. An open
  2. A close
  3. A ground
  4. A short
- 5-48. A circuit that permits an undesired path for current to return to the source is known by which of the following terms?
1. An open
  2. A ground
  3. A short
  4. A close
- 5-49. A circuit that permits current to bypass a part of the circuit is known by which of the following terms?
1. An open
  2. A short
  3. A ground
  4. A complete
- 5-50. In the Navy, power circuits are grounded and must be insulated to maintain a ground at all times.
1. True
  2. False
- 5-51. The basic element of satisfactory troubleshooting involves which of the following guidelines?
1. Logical approach
  2. Work alone
  3. Work fast
  4. Use shortcuts
- 5-52. What specific number of steps does the electronic equipment troubleshooting and maintenance procedures contain?
1. 2
  2. 4
  3. 6
  4. 8
- 5-53. Recognizing the normal condition of a piece of equipment is which step in logical troubleshooting?
1. 1
  2. 2
  3. 3
  4. 4
- 5-54. The use of test equipment is required in which of the following steps of troubleshooting?
1. 8
  2. 7
  3. 6
  4. 5
- 5-55. To locate shorts, grounds, and open circuits within electric and electronic equipment, you must perform what number of basic circuit checks?
1. 1
  2. 2
  3. 3
  4. 4
- 5-56. To reveal the amount of potential force present to move electrons in a circuit, which of the following checks must be conducted?
1. Current only
  2. Resistance only
  3. Current or resistance
  4. Voltage only
- 5-57. The measurement of the actual amount of current flowing through a circuit is determined by which of the following checks?
1. Current only
  2. Voltage only
  3. Current or voltage
  4. Resistance

5-58. The amount of opposition that a circuit offers to the flow of current is measured using which of the following types of checks?

1. Current only
2. Voltage only
3. Current or voltage
4. Resistance

5-59. A component used primarily for the rapid and accurate transmission of information between equipment and stations is which of the following devices?

1. Fuse
2. Synchro
3. Relay
4. Solenoid

5-60. Troubles in new and modified synchro systems are most often caused by which of the following conditions?

1. Poor lubrication
2. Improper wiring
3. Misalignment
4. Both 2 and 3 above



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